

# Ruggbo 20

F A P 3 0 H A N D H E L D

## Ruggbo Range

### Product Description

The BioRugged Ruggbo 20 is the next chapter in affordable rugged IP65 mobile biometrics, made for the modern world but designed to survive the real world.

Key features on the Ruggbo 20 include a new generation optical Suprema Biomini Slim 2s FIPS20/ PIV / 1GHZ CPU / ANSI fingerprint reader, 5.5inch Sun readable screen, ten thousand mAh removable battery with charge cradle(RJ45), 3/32GB Ram, 13MP dual Flash ICAO compliant camera, hand strap, stylus, and Honeywell 2D barcode reader.

With a Fully secure Android 7.1.1 with integrated SAM SIM the Ruggbo 20 creates unlimited possibilities for registration and verification purposes; however, it may be equipped optionally with a chip card reader and MIFARE NFC/RFID, thus allowing it to be used in police, election enrollment / voter's verification areas as well.

The BioRugged Ruggbo 20 is a leap forward in what is possible to be carried in one hand, contact B

### Highlights

- Qualcomm ARM Octa-core CPU @ 2.0Ghz / 64-Bit
- Independent GPU Qualcomm Adreno 405
- 5,5" IPS Full-HD multi-touch display
- 5 MP front camera
- 13 MP Camera rear camera
- Dual Sim (1 x normal & 1 x micro)
- Communications: GSM/GPRS/EDGE/3G/4GLTE/Bluetooth, 4.1/Wi-Fi
- Built-in microphone, loudspeaker, and headphone jack
- Suprema BioMini Slim 2s (S21s) - FBI/PIV/FAP20, 5



Fingerprint



NFC



Android



CONNECTIVITY  
(4G WIFI BLUETOOTH)



GPS



Camera



Rugged



Barcodescanner

### General

OS :  
**Android 7.1**

GPU :  
**Qualcomm Adreno 405**

Internal Memory :  
**2 GB DDR3 RAM & 16G ROM  
(3GB DDR3 & 32GBOption)**

Display :  
**5.5inch 400ppi IPS 1080P Multi-Touch Sun  
Readable (NITS >400 LCD)**

Battery :  
**3.6V/8000mAh**

Dimensions :  
**218.0 x 92.0 x 40.0 mm  
8.58 x 3.62 x 1.57 inch)**

4G-LTE, 3G, 2G, WCDMA, UMTS,HSDPA

**Support two modules:**

**1. Option 1 - Module E**  
FDD LTE: B1 (2100) /B3 (1800)/B5 (850) /B7 (2600)/B8 (900) /B20 (800)  
TDD LTE: B38 (2600) /B40 (2300) /B41 (2500)  
WCDMA: B1 (2100) /B5 (850) /B8 (900)

**2. Option 2 - Module AU**  
FDD LTE: B1 (2100) /B3 (1800) /B5 (850)/B7 (2600)/B8 (900)/B28 (

Gift box  
**1 x Device,  
1 x charger (US or UK or EU plug),  
1 x Manual,**

Certificate compliant  
**EMC/Safety standards: CE, FCC  
compliant RoHS / REACH compliant  
MSDS / UN38.3 Battery certification**

Battery :  
**3.7V/10,000 MAh, Removable  
• Talk time: Up to 24 hours  
• Stand-by: Up to 120 hours**

SAR  
**0.41 W/kg (head) 0.62 W/kg (body)**

Drop Tests  
**Withstands multiple drops from a  
height of 1.5m [Improved resistance to drop]**

### Operative

Back Camera :  
**13 MP with autofocus**  
• Autofocus, f /2.2 focusing,  
• Geotagging, image stabilizer  
• Dual LED flash system for enhanced brightness and avoid hot spot reflection  
• Usage for portrait capture, facial recognition, QR Codes, 1D/2D Barcodes  
• Face detectionA

Front Camera :  
**5 MP Fixed Focus**

Smart Card Reader :  
**ISO/IEC 7816 1/2/3/4 (T=0 & T=1) --  
Class A (5V) / B (3.3V) / C (1.8V)  
smart cards meet IP65**

2D barcode reader  
**N6603:HONEYWELL 1/2D + MRZ reader**

RFID Reader :  
**Optional HF or UHF**

Test : report  
**IP65 report**

Hard Pointed Stylus (Optional) :  
**Smooth, precise signature capture**

Weight :  
**About 500g (17.64 oz) with battery**

Accessories :  
**Battery charger with USB data/charge cable**

Fingerprint scanner  
**1 x Embedded Optical -  
Suprema BioMini Slim 2s [S21s]  
- FBI/PIV/FAP20, 500DPI,  
on device matching CPU @ 1Ghz**

Casing :  
**IP65, 1.5 meter drop test**

### Communications

Communications  
**GSM 900/1800, WCDMA 900/2100**

Sim Slot:  
**Supported  
( 1 x Normal Size SIM, 1 x Micro SIM)**

GPS :  
**AGPS & GPS  
(Accuracy 5-10 meter. Assisted GPS,  
using mobile network resources.)**

Bluetooth :  
**4.1 (Low Energy)**

WiFi:  
**802.11 a/b/g/n/ac**

Micro SD Slot  
**Up to 32 GB (micro SDHC)  
Up to 128 GB (micro SDXC)**

Contactless Card  
(Increased RF range up to 2 cm)  
**ISO/IEC 14443 A/B  
• ISO15693 SUPPORTED  
CARDS: MIFARE®Classic, MIFARE®Plus  
(SL0, SL1, SL2, SL3), MIFARE®UltraLight  
and UltraLight C, DESFire®  
(EV0, EV1, EV2)  
OPTIONAL: HID iClass®Seos®  
(with optional SAM module)**

PSAM  
**Withstands multiple drops from a  
height of 1.5m [Improved resistance to drop]**

**1 slot, Mini-SIM format. Enables to embed a  
SAM card to hold valuable data and secret  
keys, for cryptographic computation and  
secure authentication SAM card type:  
ISO/IEC 7816 1/2/3/4 (T=0 & T=1)  
Class A (5V) / B (3.3V) / C (1.8V)**

Charge Cradle (Optional)  
**Charge one device and 2 x batteries  
(not included) at the same time with  
RJ 45 LAN port & 2 x USB**

Ports  
**1 x Type-C USB Data (500 kb/s)**

Temperature range  
**Operating: 0° to 65°C (32° to 149°F)  
Storage: 10° to 70°C (14° to 158°F)**



BioRugged is a fast growing global market delivering solutions to an increasingly demanding rugged market of specialized devices.

Our expertise resides in creating rugged, biometric and POS devices or any combination of these technologies for a wide range of applications. Governments, logistics companies, mobile operators, healthcare organizations and military are just a few of end- users for BioRugged terminals. For more details please visit:

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